

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 01/07/2004

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. CONFIRMATION NO | | |
|------------------------------|-------------------|-------------------------|-------------------------------------|------|--|
| 10/085,255 | 02/26/2002 | Michael W. Altmann | 42390.P13739 | 1350 | |
| 7: | 590 01/07/2004 | EXAMINER | | | |
| Jan Carol Litt | le | HARRISON, MONICA D | | | |
| BLAKELY, SO Seventh Floor | OKOLOFF, TAYLOR & | ART UNIT | PAPER NUMBER | | |
| 12400 Wilshire | Boulevard | 2829 | | | |
| Los Angeles, (| CA 90025-1026 | DATE MAILED, 01/07/2004 | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| * * | | | | | | | | | | |
|---|--|---|-------------|-------------|---------------------|--|--|--|--|--|
| | | | Application | No. | Applicant(s) | | | | | |
| Office Action Comments | | | 10/085,255 | į | ALTMANN, MICHAEL W. | | | | | |
| | Office Action Summary | E | Examiner | | Art Unit | | | | | |
| | | 1 | Monica D. H | | 2829 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | | | | |
| 1) | Responsive to communication(s) filed on | | | | | | | | | |
| 2a)□ | · · · · · · · · · · · · · · · · · · · | | | | | | | | | |
| 3)□ | _ | | | | | | | | | |
| Dispositi | on of Claims | | | | | | | | | |
| 5)⊠ 6)⊠ 7)□ | 4) Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) 14-17 and 22-25 is/are withdrawn from consideration. 5) Claim(s) 1-8 is/are allowed. 6) Claim(s) 9-13 and 18-21 is/are rejected. 7) Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement. | | | | | | | | | |
| Application Papers | | | | | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 26 February 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. | | | | | | | | | | |
| 2) Notic | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (I mation Disclosure Statement(s) (PTO-1449) F | | 5 |) | | | | | | |

Art Unit: 2829

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Parrillo et al (4,753,898).

- 1. Regarding claim 9, Parrillo et al discloses a method comprising: forming two rectangular diffusions of P (+) material (Figure 6, reference 66) in a well or in an n-well (Figure 6, reference 24) formed in or on a substrate (Figure 1, reference 20); and defining a spacing between the two rectangular diffusions of P (+) material (Figure 6, spacing from drain 66 to source 66 is defined by gate 34) using a polycide gate in a complimentary metal oxide semiconductor (CMOS) process (column 3, lines 23-28).
- 2. Regarding claim 10, Parrillo et al discloses further comprising diffusing an n-well into the substrate (Figure 6, reference 24).
- 3. Regarding claim 11, Parrillo et al discloses further comprising diffusing an N (+) well into the substrate (Figure 6, reference 24).
- 4. Regarding claim 12, Parrillo et al discloses further comprising defining a spacing between the two rectangular diffusions of P (+) material using at least one of a lightly doped drain (LDD) structure or halo implantation (column 3, lines 36-68 thru column 4, lines 1-9).

Application/Control Number: 10/085,255 Page 3

Art Unit: 2829

5. Regarding claim 13, Parrillo et al discloses wherein forming two rectangular diffusions of P (+) material in or on an n-well formed in or on a substrate in a CMOS process comprises forming two rectangular diffusions of P (+) material in or on a n-well formed in or on a non-epitaxial substrate (column 3, lines 4-33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parrillo et al (4,753,898).

6. Parrillo et al discloses all claimed subject matter except a machine readable medium (claim 17). The machine readable medium is used for the purpose of instructing a processor to complete the method of claim 8. According to MPEP 2144.04 (III), the court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over the prior art.

Allowable Subject Matter

- 7. Claims 1-8 are allowed over the prior art of record.
- 8. The following is an examiner's statement of reasons for allowance: The primary reason for allowance of the claims is that the prior art neither teaches nor fairly suggest a CMOS process as presented in independent claim 1. Major emphasis is being placed upon the provision of "disposing a pair of inductors on a substrate and coupling the two rectangular diffusions of P

Que

(+) material and the pair of inductors in a voltage controlled oscillator (VCO) configuration", in combination with other limitations of the said claim and its dependent ones.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica D. Harrison whose telephone number is 571-272-1959. The examiner can normally be reached on M-F 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-306-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Monica D. Harrison AU 2829

Mdh

December 23, 2003